0032470 DATA SHEET

valid from: 2021-10-20 RD-Y(ST)Y



Application

RD-Y(ST)Y process control cable is used mainly for data transmission in the fields of control centres, controlling systems and units. It is intendend for static wiring or laying in closed interiors.

The cable may not be used for purposes with power or high-voltage current.

Design

Design based on VDE 0815

Certification Classification of fire behaviour

according to EN 13501-6 and EN 50575

(article/dimension range see www.lappkabel.com/cpr)

Conductor Strands, 7-wires of plain copper acc. to VDE 0295 class 2

nom. cross section 0,5 mm²

Insulation PVC YI3 compound acc. to VDE 0207-4

Core identification code Pair no. 1: a-conductor: blue; b-conductor: red

Pair no. 2: a-conductor: grey; b-conductor: yellow

Pair no. 3: a-core: green; b-core brown Pair no. 4: a-core: white; b-core black

4 pairs = 1 bundle/bundles marked by numbered foil

Stranding 2 cores twisted to pairs and 4 pairs twisted to a unit

(2 x 2 x 0,5 mm² version is star quad stranded)

units in layers, plastic foil, static screen of Aluminium laminated plastic foil

with multi-wired and tinned drain-wire

Outer sheath PVC YM1 compound acc. to VDE 0207-5, flame retardant

sheath colour:

silver-grey (similar RAL 7000)

Electrical properties at 20 °C

Conductor resistance max. $78.4~\Omega/km$ Insulation resistance max. $100~\Omega/km$ Mutual capacitance A/A: max. 100~nF/km

> 2 and 4 pairs: A/A: max. 120 nF/km

(at 800 Hz)

Capacitive coupling max. 200 pF/100 m (at 800 Hz)

Characteristic impedance ca. 370 Ω (at 1 kHz)

ca. 130 Ω (at 10 kHz)1,2 dB/km (at 1 kHz)

Attenuation 1,2 dB/km (at 1 kHz) 2,8 dB/km (at 10 kHz)

min. 60 dB (at 10 kHz)

Maximum operating voltage 225 V (not for power applications)

Must not be connected to the mains supply voltage.

Test voltage C/C: 2000 V

C/S: 2000 V

Mechanical and thermal properties

Near-end cross-talk

Temperature range

Minimum bending radius Occasional flexing: 15 x outer diameter

Fixed installation: 7,5 x outer diameter Occasional flexing: -5°C up to +50°C Fixed installation: -40°C up to +80°C

Flammability flame retardant acc. to EN 60332-1-2 resp. IEC 60332-1-2

Tests based on DIN VDE 0815

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General requirements These cables are conform to

EU-Directive 2014/35/EU (Low Voltage Directive) and to

EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain

hazardous substances).

These cables (see www.lappkabel.com/cpr) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

Environmental information These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

Note Trade product, no Lapp product

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